ABSTRACT

In an electronic appliance, accelerations in X-direction, in Y-direction that is orthogonal relative to the X-direction and in Z-direction that is orthogonal relative to both the X-direction and the Y-direction are synthesized and the size of the synthetic acceleration vector formed by synthesizing the accelerations is detected, associated with the clock time of the detection and stored in a synthetic acceleration memory (4). A fall candidate is detected when the size of the synthetic acceleration vector is stabilized at a value close to a for a predetermined time period and clock time T1 that is associated with the synthetic acceleration vector that has a size equal to predetermined value b and closest to the clock time T1 when the fall candidate is detected is determined by retrieving the sizes of the synthetic acceleration vectors stored in the synthetic acceleration memory (4). Then, the stability of the sizes of the synthetic acceleration vectors from clock time T2 to clock time T1 that corresponds to the size of the synthetic acceleration vector that was stored earliest in the synthetic acceleration memory (4) is detected. Then, the electronic appliance is determined to be falling when a fall candidate is detected and the stability is found within a predetermined range.